

WHAT IS CLAIMED IS:

1. A method for diagnosing cancer by measuring DNA-dependent protein kinase activity in cells derived from a test subject.

5 2. A method for diagnosing cancer, the method comprising the steps of:

measuring DNA-dependent protein kinase activity in cells derived from a test subject;

measuring DNA-dependent protein kinase activity in cells derived from a healthy subject;
10 and

comparing the DNA-dependent protein kinase activity in cells derived from the test subject and the DNA-dependent protein kinase activity in cells
15 derived from the healthy subject.

3. The method for diagnosing cancer according to claim 1 or 2, wherein the cells are

lymphoid cells.

4. A cancer diagnosis kit for diagnosing cancer by the method for diagnosing cancer according to any one of claims 1 to 3.

5. The cancer diagnosis kit for diagnosing cancer by the method for diagnosing cancer according to any one of claims 1 to 3, the kit comprising a peptide substrate which is phosphorylated by DNA-dependent protein kinase.

10. A method for determining cancer susceptibility by measuring DNA-dependent protein kinase activity in cells derived from a test subject.

7. A method for determining cancer susceptibility, the method comprising the steps of:

15. measuring DNA-dependent protein kinase activity in cells derived from a test subject;

measuring DNA-dependent protein kinase

activity in cells derived from a healthy subject;
and

comparing the DNA-dependent protein kinase activity in cells derived from the test subject and
5 the DNA-dependent protein kinase activity in cells derived from the healthy subject.

8. The method for determining cancer susceptibility according to claim 6 or 7, wherein the cells are lymphoid cells.

10 9. A cancer susceptibility determination kit for determining cancer susceptibility by the method for determining cancer susceptibility according to any one of claims 6 to 8.

10. The cancer susceptibility determination
15 kit for diagnosing cancer by the method for diagnosing cancer susceptibility according to any one of claims 6 to 9, the kit comprising a peptide substrate which is phosphorylated by DNA-dependent

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protein kinase.